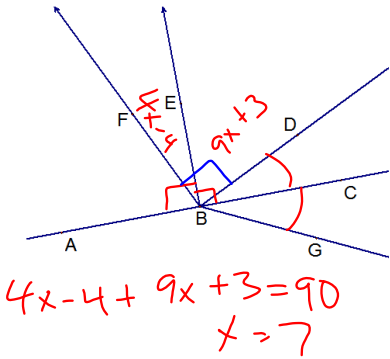


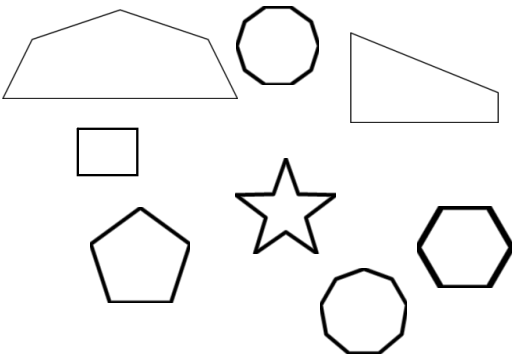
$\overrightarrow{AB} \perp \overrightarrow{BE}$, $\overrightarrow{BF} \perp \overrightarrow{BD}$
 \overrightarrow{BC} bisects $\angle DBG$



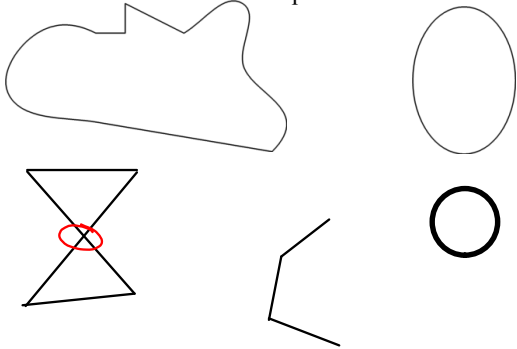
1-6 Polygons

- polygon--closed figure, whose sides are all segments
- sides have a common endpoint and are non collinear
 - each side intersects exactly 2 other sides

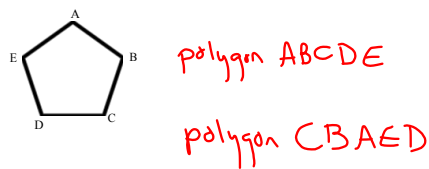
Examples




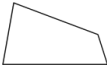
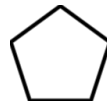

Non-Examples

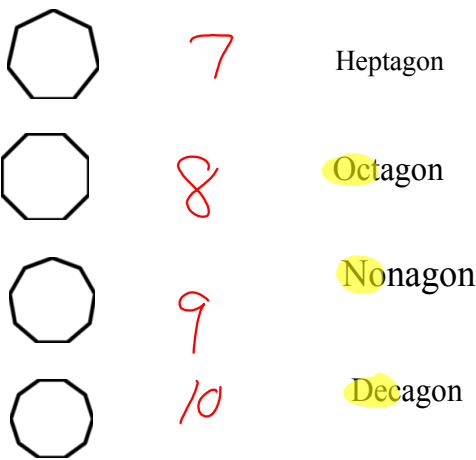


Name by the vertices, in consecutive order

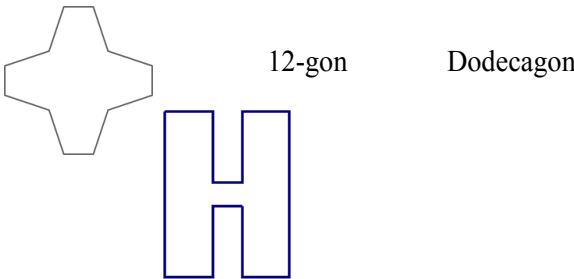


Types of Polygons

Shape	# of sides	Name
	3	Triangle
	4	Quadrilateral
	5	Pentagon
	6	Hexagon

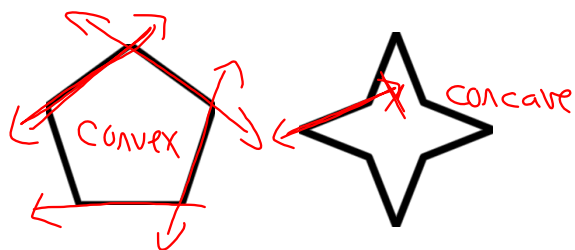


11-gon



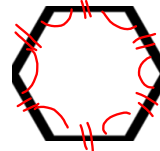
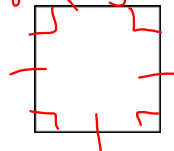
Convex--A polygon is convex, if the line containing a side does not contain points on the interior of the polygon

Concave--Not convex



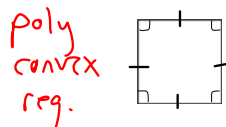
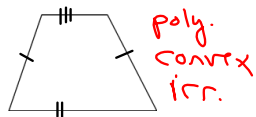
Regular Polygon--convex polygon where all of the sides are congruent, and all of the angles are congruent

equilateral = all \cong sides
equiangular = all \cong \angle s

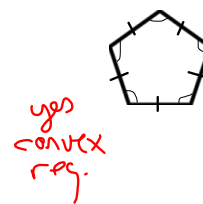


Classify the following figures as:

- polygon or not (if polygon, what type)
- convex or concave
- regular or irregular

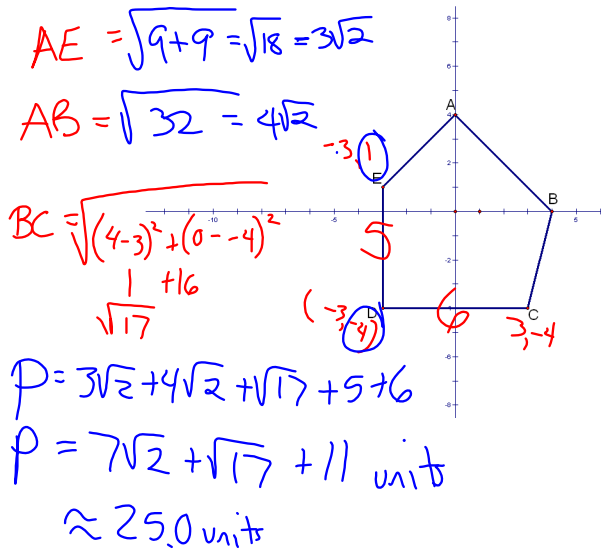


yes
concave
irr.

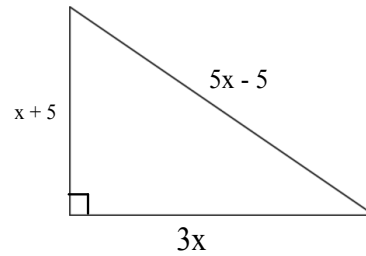


Find the perimeter of ABCDE

A(0, 4) B(4, 0) C(3, -4) D(-3, -4) E(-3, 1)



If the perimeter of the triangle below is 36 units, find the length of the sides.



Do:

Find the perimeter of MNOP M(3,3) N(3, -4) O(0,0) P(-5,3)

HW

p48-50

#s 5-8, 26, 29-33